

INSTALLATION INSTRUCTIONS

Original Issue Date: 3/11

Model: **20RES/20RESL and 20RESA/RESAL Generator Sets**

Market: **Residential/Commercial**

Subject: **Regulator Heater Kits GM79141-KP1-QS and GM79141-S**

Introduction

Regulator heater kits GM79141-KP1-QS and GM79141-S are designed for the generator set models listed below.

- 20RES and 20RESL
- 20RESA and 20RESAL

The regulator heater kit is recommended for reliable engine starting in temperatures from -18°C to -29°C (0°F to -20°F). See Figure 1 for heater specifications.

The regulator heater is a 127 mm (5 in.) diameter round heating pad with a snap action thermostat and a power cord. Figure 2 and Figure 3 show the heater installed on the fuel regulator, which is located on the air intake side of the generator set.

The regulator heater requires a source of 120 VAC power. The generator set is equipped with one or two

120 VAC receptacles. On the Model 20RES and 20RESL, one of the receptacles is used for the battery charger. A receptacle adapter is included in the kit to allow more than one accessory to be plugged into the receptacle.

Read the entire installation procedure and compare the kit parts with the parts list on the last page before beginning installation. Perform the steps in the order shown.

Regulator Heater	
Heater rating	120 VAC, 60 W
Thermostat	4°C/13°C (40°F/55°F) Snap action
Pad diameter	127 mm (5 in.)
Cord length	610 mm (24 in.)

Figure 1 Heater Specifications

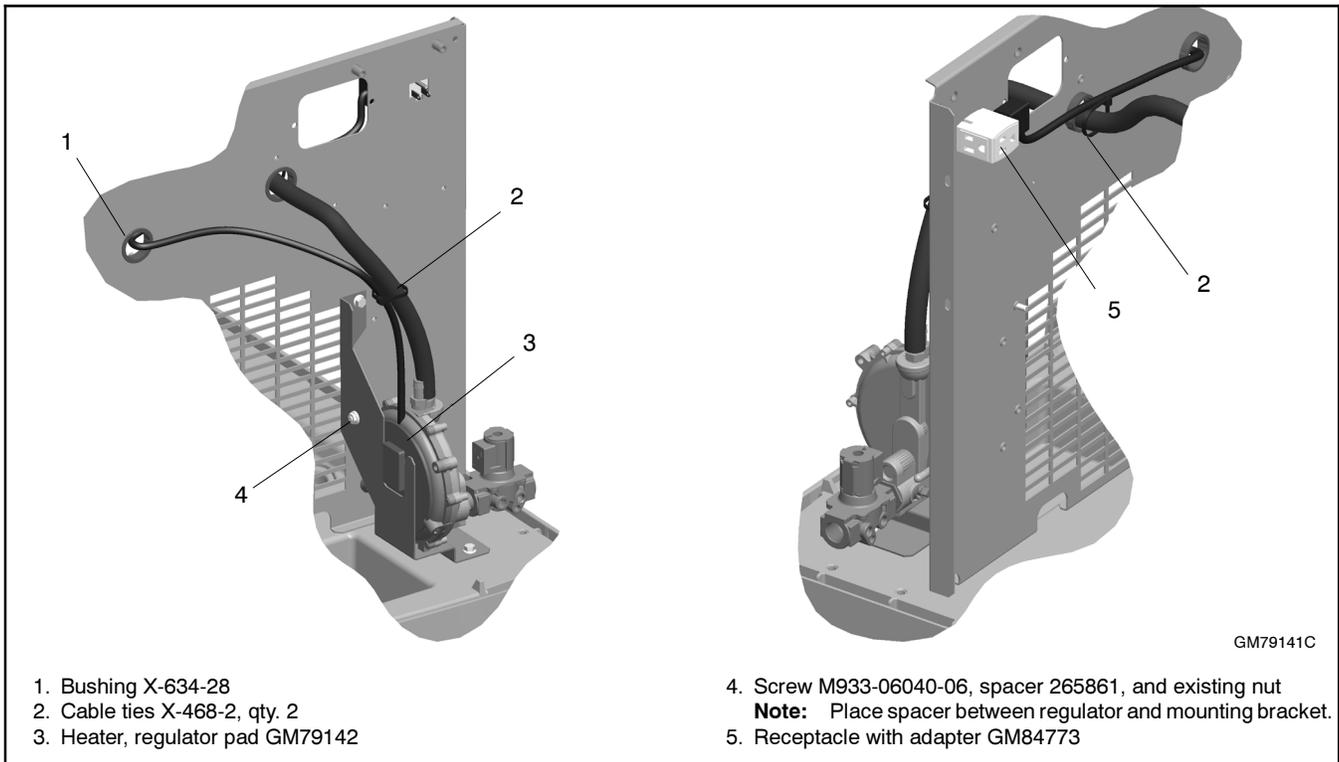


Figure 2 Regulator Heater Installation, Model 20RESA/RESAL

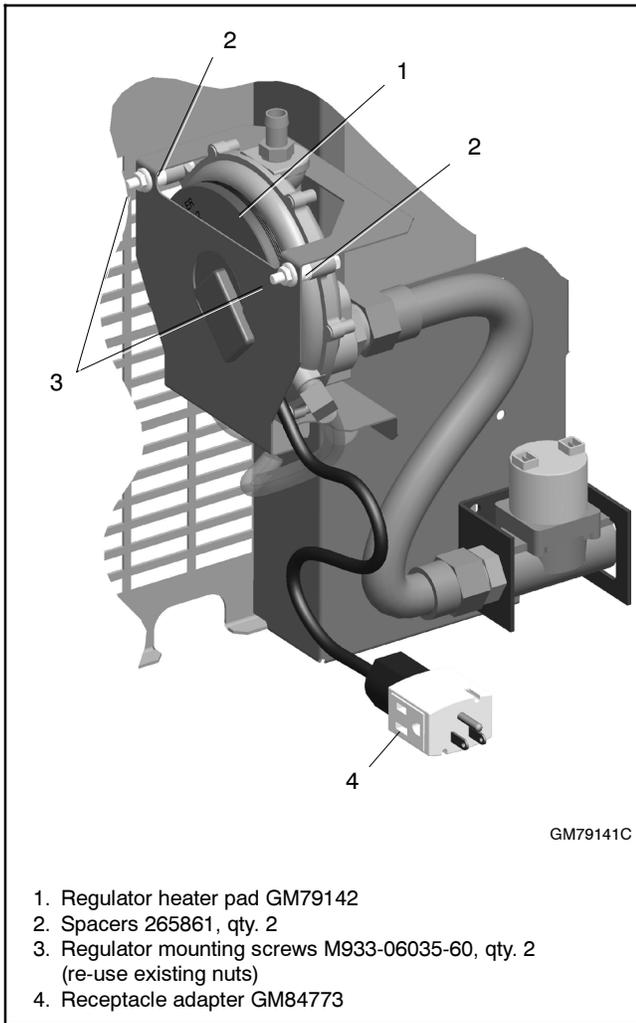


Figure 3 Regulator Heater Installation, Model 20RES/RESL

Safety Precautions

Observe the following safety precautions while installing the kit.

⚠ WARNING



Accidental starting. Can cause severe injury or death.

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

Disabling the generator set. Accidental starting can cause severe injury or death. Before working on the generator set or equipment connected to the set, disable the generator set as follows: (1) Press the generator set off/reset button to shut down the generator set. (2) Disconnect the power to the battery charger, if equipped. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent the starting of the generator set by the remote start/stop switch.

Installation Procedure

1. Disconnect the utility power coming into the generator set by opening the circuit breaker(s).
2. Open the enclosure roof.
3. Press the OFF button on the generator set controller.
4. Remove two (2) screws on the intake panel and remove the panel. See Figure 4.
5. Model 20RES/RESL: Unplug the battery charger.
6. Disconnect the generator set engine starting battery(ies), negative (-) lead first.
7. See Figure 2 or Figure 3. Remove the screw(s) that secure the fuel regulator to the mounting bracket. Keep the nut(s), which will be re-used. Discard the screw(s).

Note: The RESA/RESAL models use one screw and one nut. See Figure 2.

8. Before attaching heater pad GM79142 to the regulator, hold the pad and regulator in place as shown in Figure 2 or Figure 3. Rotate the heater pad, if necessary, to ensure that the power cord reaches the power receptacle without rubbing against any sharp edges.
9. Remove the backing from the mounting adhesive on heater pad GM79142 and press the heater pad onto the fuel regulator.
10. Reinstall the regulator onto the mounting bracket using screw(s) M933-06040-60, spacer(s) 265861, and the nuts that were removed in step 7. Install the spacer(s) between the regulator and the mounting bracket. See Figure 2 or Figure 3.

Note: 20RESA/RESAL: Discard the extra screw and spacer provided with the kit.

11. Model 20RESA/RESAL: Remove and discard the existing plug from the opening in the bulkhead. See Figure 2. Insert bushing X-634-28.
12. Route the power cord to avoid contact with any sharp edges. Use the cable ties X-468-2, provided with the kit, to secure the power cord. See Figure 2.
13. Plug the heater's power cord into the 120 VAC receptacle. Use receptacle adapter GM84773, provided with the kit, if the battery charger or other generator set accessories will be plugged into the same receptacle.

14. Reconnect the engine starting battery, negative (-) lead last.
15. 20RES/RESL: Plug the battery charger's power cord into the receptacle or the receptacle adapter, if used.
16. Replace the air intake end panel and secure with two screws.
17. Reconnect the utility power to the generator set by closing the circuit breaker(s).
18. Press the AUTO button on the generator set controller to put the system into automatic mode.
19. Close the roof and lock the enclosure.

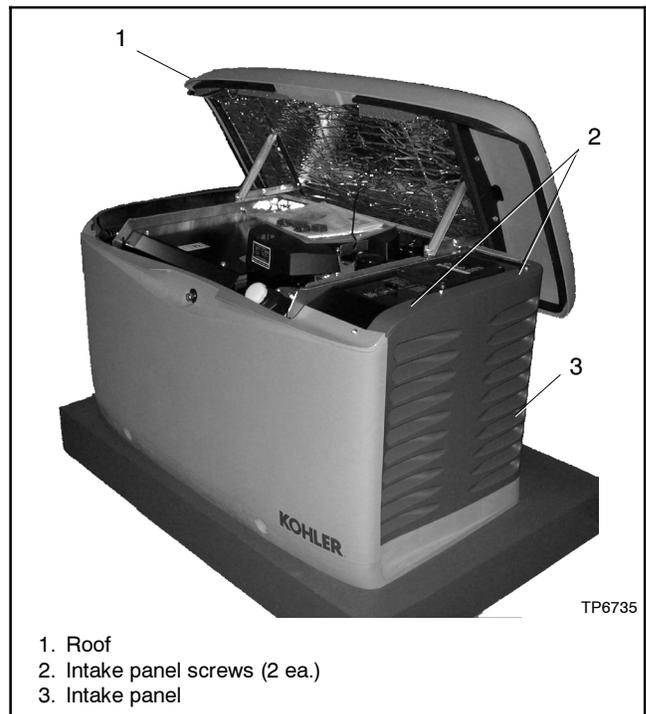


Figure 4 Enclosure Roof and Air Intake Panel

Parts List

Regulator Heater Kit

Kit: GM79141-KP1-QS, -S		
Qty.	Description	Part Number
2	Spacer, 0.281 x 0.500 x 0.375 steel	265861
1	Adapter, receptacle, 3-wire	GM84773
1	Heater, regulator pad	GM79142
2	Screw, hex cap	M933-06040-60
2	Tie, cable	X-468-2
1	Bushing	X-634-28
1	Installation Instructions	TT-1569